

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-5. (Canceled)

6. (Currently Amended) A passenger aircraft comprising:

a cabin sub-divided into a plurality of cabin zones supplied with feed air from respective supply lines;

a plurality of temperature sensors located in at least one of the plurality of cabin zones and operable to measure a plurality of individual ambient temperature values for different locations in the at least one cabin zone; and

an electronic control unit coupled to the plurality of temperature sensors and configured to derive ~~an actual~~ a derived ambient temperature value for the at least one cabin zone from the plurality of individual ambient temperature values for the at least one cabin zone, and further configured to control a ~~[[the]]~~ temperature of ~~[[the]]~~ feed air supplied to the at least one cabin zone based on a difference between the derived ~~actual~~ ambient temperature value for the at least one cabin zone and a room temperature target value for the at least one cabin zone.

7. (Previously Presented) The passenger aircraft of claim 6, wherein at least a portion of the plurality of temperature sensors are positioned at different locations in the at least one cabin zone.

8. (Previously Presented) The passenger aircraft of claim 7, wherein at least a portion of the plurality of temperature sensors are spaced from each other along a lengthwise direction of the at least one cabin zone.

9. (Previously Presented) The passenger aircraft of claim 8, wherein each of the plurality of temperature sensors are spaced from each other along a lengthwise direction of the at least one cabin zone.

10. (Currently Amended) The passenger aircraft of claim 6, wherein the electronic control unit derives the ~~derived~~ actual ambient temperature value for the at least one cabin zone by averaging at least a portion of the plurality of individual ambient temperature values for the at least one selected cabin zone.

11. (Currently Amended) ~~The passenger aircraft of claim 10;~~ A passenger aircraft comprising:

a cabin sub-divided into a plurality of cabin zones supplied with feed air from respective supply lines;

a plurality of temperature sensors located in at least one of the plurality of cabin zones and operable to measure a plurality of individual ambient temperature values for different locations in the at least one cabin zone; and

an electronic control unit coupled to the plurality of temperature sensors and configured to derive a derived ambient temperature value for the at least one cabin zone from the plurality of individual ambient temperature values for the at least one cabin zone, and further configured to control a temperature of feed air supplied to the at least one cabin zone based on a difference

between the derived ambient temperature value for the at least one cabin zone and a room temperature target value for the at least one cabin zone,

wherein the electronic control unit derives the derived ambient temperature value for the at least one cabin zone by averaging at least a portion of the plurality of individual ambient temperature values for the at least one cabin zone, and

wherein the electronic control unit compares each of the plurality of individual ambient temperature values for the at least one cabin zone to a predetermined reference value, and averages only the individual ambient temperature values that comply with a predetermined condition with respect to the predetermined reference value.

12. (Currently Amended) ~~The passenger aircraft of claim 11, A passenger aircraft comprising:~~

a cabin sub-divided into a plurality of cabin zones supplied with feed air from respective supply lines;

a plurality of temperature sensors located in at least one of the plurality of cabin zones and operable to measure a plurality of individual ambient temperature values for different locations in the at least one cabin zone; and

an electronic control unit coupled to the plurality of temperature sensors and configured to derive a derived ambient temperature value for the at least one cabin zone from the plurality of individual ambient temperature values for the at least one cabin zone, and further configured to control a temperature of feed air supplied to the at least one cabin zone based on a difference between the derived ambient temperature value for the at least one cabin zone and a room temperature target value for the at least one cabin zone,

wherein the electronic control unit derives the derived ambient temperature value for the at least one cabin zone by averaging at least a portion of the plurality of individual ambient temperature values for the at least one cabin zone, and

wherein the electronic control unit compares each of the plurality of individual ambient temperature values with an upper threshold value and a lower threshold value, and ~~predetermined reference value is a threshold temperature range,~~ and the electronic control unit only averages the individual ambient temperature values that are determined to be lower than the upper threshold value and higher than the lower threshold value within the ~~threshold temperature range.~~

13. (New) The passenger aircraft of claim 10, wherein individual ambient temperature values are weighted with respect to one another when averaging at least a portion of the plurality of individual ambient temperature values, in order to reduce the effect of temporary temperature fluctuations on the derived ambient temperature value.